WEST Search History

DATE: Monday, August 11, 2003

Set Name	Query	Hit Count	Set Name
side by side	· · · · · ·		result set
DB=EP	AB; PLUR=YES; OP=ADJ		
L5	regenerated collagen fiber	6	L5
DB = JPA	AB; PLUR=YES; OP=ADJ		
L4	regenerated collagen fiber	17	L4
L3	L2	0	L3
DB=PG	PB; PLUR=YES; OP=ADJ		
L2	regenerated collagen fiber	0	L2
DB=USPT; PLUR=YES; OP=ADJ			
L1	regenerated collagen fiber	7	L1

END OF SEARCH HISTORY

WEST

Generate Collection

Print

Search Results - Record(s) 1 through 10 of 17 returned.

1. Document ID: JP 2003027318 A

L4: Entry 1 of 17

File: JPAB

Jan 29, 2003

PUB-NO: JP02003027318A

DOCUMENT-IDENTIFIER: JP 2003027318 A

TITLE: WEAVING COMPOSED OF REGENERATED COLLAGEN FIBER

PUBN-DATE: January 29, 2003

INVENTOR - INFORMATION:

NAME

COUNTRY

FURUKAWA, MITSURU TAKADA, MASAHIKO YAGUCHI, TOMOHIKO

INT-CL (IPC): A41 G $\frac{3}{00}$

ABSTRACT:

PROBLEM TO BE SOLVED: To obtain a weaving which can be styled by a high-temperature hair iron and has high heat resistance by using a <u>regenerated collagen fiber</u> as a hair raw material replacing human hair.

SOLUTION: This weaving is obtained from a regenerated collagen fiber and comprises the regenerated collagen fiber having ≤5% shrinkage percentage during the use of a hair iron at 160°C. Further, preferably the regenerated collagen fiber is obtained by a wet-heat treatment at 40-140°C. Further, preferably the regenerated collagen fiber is treated with a monofunctional epoxy compound and an aluminum salt.

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Full | Title | Citation | Front | Review | Classication | Date | Retorence | Sequences | Attachments | Claims | WMC | Draw Deco | Imago |

2. Document ID: JP 2002249982 A

L4: Entry 2 of 17

File: JPAB

Sep 6, 2002

PUB-NO: JP02002249982A

DOCUMENT-IDENTIFIER: JP 2002249982 A

TITLE: CHEMICALLY MODIFIED REGENERATED COLLAGEN FIBER

PUBN-DATE: September 6, 2002

INVENTOR-INFORMATION:

NAME

COUNTRY

CHIBA, TAKESHI UEDA, MASAHIRO KAWAMURA, KOHEI INT-CL (IPC): D06 M 13/11; D01 F 4/00; D06 M 11/57

ABSTRACT:

PROBLEM TO BE SOLVED: To obtain a <u>regenerated collagen fiber</u> having a light color, an excellent sense of touch in wetting, allowing readily forming a fixed shape, firmly setting and retaining the shape.

SOLUTION: This regenerated collagen fiber has a structure in which ≥50% of free amino group of regenerated collagen is modified with a 2-20C alkyl group of a main chain containing a hydroxy group or an alkoxy group at the B-position or γ-position and contains an aluminum compound in the fiber. In the regenerated collagen fiber, the alkyl group is preferably a compound represented by general formula (I) -CH

COPYRIGHT: (C) 2002, JPO

Full Title | Citation | Front | Review | Classification | Date | Retoience | Sequences | Attachments | Claims | 1060 | Draw Desc | Image:

3. Document ID: JP 2000064173 A

L4: Entry 3 of 17

File: JPAB

Feb 29, 2000

PUB-NO: JP02000064173A

DOCUMENT-IDENTIFIER: JP 2000064173 A

TITLE: TREATMENT OF REGENERATED COLLAGEN FIBER

PUBN-DATE: February 29, 2000

INVENTOR-INFORMATION:

NAME

COUNTRY

SAKASHITA, SHINICHI GOTO, MASAOKI MATSUMURA, KUNIHIKO HIROKAWA, NORIO

INT-CL (IPC): D06 M 13/133; D01 F 4/00

ABSTRACT:

PROBLEM TO BE SOLVED: To provide a method for treating a regenerated collagen fiber having low water absorptivity and excellent touch in a wet state and capable of allowing a carboxyl group to be also chemically modified by treating the regenerated collagen fiber with a halogenated aldehyde, and subjecting the treated fiber to an amidation reaction by using a specific diamine and a condensing agent.

SOLUTION: A regenerated collagen fiber is subjected to an insolubilizing treatment with a halogenated aldehyde of the formula XnRCHO [X is a halogen; R is a

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Full | Title | Citation | Front | Review | Classification | Date | Reterence | Sequences | Attachments | Claums | 1,000 | Dram Desc | Image |

4. Document ID: JP 11323727 A

L4: Entry 4 of 17

File: JPAB

Nov 26, 1999

PUB-NO: JP411323727A

DOCUMENT-IDENTIFIER: JP 11323727 A

TITLE: IMPROVED REGENERATED COLLAGEN FIBER AND ITS PRODUCTION

PUBN-DATE: November 26, 1999

INVENTOR-INFORMATION:

NAME

COUNTRY

SAKASHITA, SHINICHI TSUGAWA, JO GOTO, MASAOKI MATSUMURA, KUNIHIKO HIROKAWA, NORIO

INT-CL (IPC): $\underline{\text{D06}}$ $\underline{\text{M}}$ $\underline{\text{11}}/\underline{\text{57}}$; $\underline{\text{D01}}$ $\underline{\text{F}}$ $\underline{\text{4}}/\underline{\text{00}}$; $\underline{\text{D06}}$ $\underline{\text{M}}$ $\underline{\text{13}}/\underline{\text{133}}$

ABSTRACT:

PROBLEM TO BE SOLVED: To obtain regenerated collagen fibers having the drape, gloss and touch of natural protein fibers and useful as a substitute for human hair, animal hair or guts, etc., by subjecting the collagen and a diamine having a disulfide bond to an amidation reaction using a condensing agent.

SOLUTION: The regenerated collagen fibers having mercapto groups and/or disulfide bonds which have a sulfur content of 0.3-5.1 wt.% based on the collagen are obtained by subjecting the collagen and a disulfide band-having diamine of formula I [(n) and (m) are each an integer of 1-4] and/or formula II (R

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Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attrichments

NAME | Branc Besc | Image

5. Document ID: JP 10168629 A

L4: Entry 5 of 17

File: JPAB

Jun 23, 1998

PUB-NO: JP410168629A

DOCUMENT-IDENTIFIER: JP 10168629 A TITLE: TOUPEE USING PROTEIN FIBER

PUBN-DATE: June 23, 1998

INVENTOR-INFORMATION:

NAME

COUNTRY

FURUKAWA, MITSURU TAKADA, MASAHIKO KAWAMURA, KOHEI

INT-CL (IPC): A41 G 3/00

ABSTRACT:

PROBLEM TO BE SOLVED: To provide a toupee wet in touch, enabling to always supply the uniform product from a raw material stable in the quality, and excellent in the quality by binding protein fibers having a half and half strength of a prescribed value or larger as a hair raw material to a base net.

SOLUTION: This toupee closely resembling human hair is obtained by binding and transplanting protein fibers 2, such as regenerated collagen fibers, casein fibers,

fibroin fibers or polyglutamate fibers, having a half and half strength of ≥50g as a hair raw material to a base net.

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Full Title Chatton Front Feview Classification Date Retempoe Sequences Attachments

KMIC DIWM Desc | Clip Img | Image |

6. Document ID: JP 10168628 A

L4: Entry 6 of 17

File: JPAB

Jun 23, 1998

PUB-NO: JP410168628A

DOCUMENT-IDENTIFIER: JP 10168628 A

TITLE: LESSON MANNEQUIN WIG USING PROTEIN FIBER

PUBN-DATE: June 23, 1998

INVENTOR-INFORMATION:

NAME

COUNTRY

FURUKAWA, MITSURU TAKADA, MASAHIKO KAWAMURA, KOHEI

INT-CL (IPC): A41 G 3/00; G09 B 19/24

ABSTRACT:

PROBLEM TO BE SOLVED: To provide the subject wig capable of being continuously produced, enabling to supply the products in a constant quality, and useful for learning a hair cut technique, etc., by using protein fibers having a prescribed water absorption coefficient and a wet strength as a hair raw material.

SOLUTION: This lesson mannequin wig closely resembling human hair is obtained by transplanting protein fibers, such as <u>regenerated collagen fibers</u>, casein fibers, fibroin fibers or polyglutamate fibers, having a water absorption coefficient of 30-200% and a wet strength of ≥0.7g/d as hair raw material to a base head by the use of a sewing machine or a hand.

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Full Fille | Chation | Front | Review | Classification | Date | Reference | Sequences | Affactioneris

Kinac Draw Daso Image:

3 7. Document ID: JP 09250081 A

L4: Entry 7 of 17

File: JPAB

Sep 22, 1997

PUB-NO: JP409250081A

DOCUMENT-IDENTIFIER: JP 09250081 A

TITLE: METHOD FOR APPLYING SHAPE TO REGENERATED COLLAGEN FIBER

PUBN-DATE: September 22, 1997

INVENTOR - INFORMATION:

NAME

COUNTRY

MURATA, TERUICHI FURUKAWA, MITSURU TAKADA, MASAHIKO KASHIWAKURA, ERIKO YUGUCHI, MUNENORI

INT-CL (IPC): <u>D06 M</u> <u>11/56</u>

ABSTRACT:

PROBLEM TO BE SOLVED: To obtain a wig, etc., having improved shape-memory effect while suppressing the generation of crimp and shrinkage by subjecting a <u>regenerated</u> collagen fiber to a wet treatment with a specific aqueous solution and heating the product to apply a fixed shape to the regenerated collagen fiber.

SOLUTION: A regenerated collagen fiber is subjected to wet-treatment with an aqueous solution containing a sulfate of a univalent cation such as Li2SO4 or a bivalent cation such as MgSO4 (the pH of the solution is preferably 5-10) at the time of applying the desired shape and the treated fiber is heated while keeping wet state to impart the regenerated collagen fiber with fixed shape. The concentration of the sulfate is preferably from 5% to the saturated concentration.

COPYRIGHT: (C) 1997, JPO

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments |

KudC | Draw tresc | Image

8. Document ID: JP 08035193 A

L4: Entry 8 of 17

File: JPAB

Feb 6, 1996

PUB-NO: JP408035193A

DOCUMENT-IDENTIFIER: JP 08035193 A

TITLE: PRODUCTION OF COLLAGEN FIBER NONWOVEN FABRIC SHEET

PUBN-DATE: February 6, 1996

INVENTOR-INFORMATION:

NAME

COUNTRY

TAKEUCHI, SATORU
TAKIGAWA, TAKASHI
IWASE, KUNIO
OCHIAI, HIROSHI
SAKAKIBARA, MASANORI

INT-CL (IPC): $D21 + \frac{13}{34}$; $A61 + \frac{15}{16}$; $D01 + \frac{4}{00}$

ABSTRACT:

PURPOSE: To obtain a collagen fiber nonwoven fabric sheet sufficiently exhibiting hemostatic ability as a hemostatic agent, improved in operability in treating hemostasis and capable of rapidly and effectively applying to every wounds in a surgery region.

CONSTITUTION: This producing method comprises discharging an acidic solution of a soluble collagen from a spinneret into an aqueous solution of concentrated salts to solidify the collagen, cutting the resultant regenerated collagen fiber and dispersing the collagen fiber into an organic solvent not dissolving collagen or a mixed solution of the organic solvent with water and making the dispersion into a

nonwoven sheet.

COPYRIGHT: (C) 1996, JPO

Full Fille | Cdation | Front | Review | Classification | Date | Reference | Sequences | Attachments

ianac Draw Desc Image:

9. Document ID: JP 07097714 A

L4: Entry 9 of 17

File: JPAB

Apr 11, 1995

PUB-NO: JP407097714A

DOCUMENT-IDENTIFIER: JP 07097714 A TITLE: PRODUCTION OF COLLAGEN FIBER

PUBN-DATE: April 11, 1995

INVENTOR - INFORMATION:

NAME

COUNTRY

AKASAKA, MASANORI
TAKEUCHI, SATORU
TERASAWA, KAORU
KOTANI, OSAMU
TAKIGAWA, TAKASHI
SAKAKIBARA, MASANORI

INT-CL (IPC): D01 F 4/00; A61 L 15/16; D01 D 5/06

ABSTRACT:

PURPOSE: To obtain collagen fiber useful as a hemostatic material having a low residual salt content rapidly and effectively applicable to wound part, exhibiting hemostatic ability, having improved handleability in hemostatic treatment:

CONSTITUTION: This collagen fiber is obtained by dissolving solubilized collagen in an acidic aqueous solution, injecting the solution into a concentrated aqueous solution of a salt, coagulating, washing regenerated collagen fiber with water containing 30-90vol.% of an alcohol at 10-40°C.

COPYRIGHT: (C) 1995, JPO

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attochments

13MC Braw Desc Image:

10. Document ID: JP 06306765 A

L4: Entry 10 of 17

File: JPAB

Nov 1, 1994

PUB-NO: JP406306765A

DOCUMENT-IDENTIFIER: JP 06306765 A

TITLE: COLLAGEN FIBER GOOD IN WATER RESISTANCE

PUBN-DATE: November 1, 1994

INVENTOR - INFORMATION:

```
102190-94-3, Poly(hydroxyvaleric acid)
     RL: DEV (Device content use); THU (Therapeutic us BIOL (Biological
     study); USES (Uses)
        (drug delivery devices including protein matrix materials)
     67-68-5, Dmso, biological studies 7732-18-5, Water, biological studies
IT
     RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological
     study); USES (Uses)
        (solvent; drug delivery devices including protein matrix materials)
    ANSWER 2 OF 3 CAPLUS COPYRIGHT 2003 ACS on STN
L1
     2002:504989 CAPLUS
ΑN
    137:48511
DN
     Process for producing regenerated collagen fibers and process
TΙ
     for setting them
     Ueda, Takashi; Chiba, Takeshi; Kawamura, Kohei
ΙN
PA
     Kaneka Corporation, Japan
     PCT Int. Appl., 36 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LΑ
    Japanese
IC
     ICM D06M013-11
     40-2 (Textiles and Fibers)
CC
     Section cross-reference(s): 62
FAN.CNT 1
                    KIND DATE
                                        APPLICATION NO. DATE
    PATENT NO.
     -----
                                         ------
                     A1 20020704
                                        WO 2001-JP11250 20011221
    WO 2002052099
        W: AU, CN, JP, KR, US
        RW: DE, FR, GB, IT
PRAI JP 2000-390767
                    Α
                           20001222
    The process comprises treating regenerated collagen fibers with
     a monofunctional epoxy compd. and a metallic aluminum
     salt, characterized in that, in the treatment with the monofunctional
     epoxy compd., NaOH is added to a concn. of 0.001-0.8 N in the
     liquor to be treated and the treatment is initiated by adding an inorg.
     salt (e.g., Na2SO4) in such a level as to give the water absorption ratio
     of the regenerated collagen fibers of .ltoreg.100% depending on
     the amt. of NaOH added. A process for setting the regenerated
     collagen fibers comprises heat-setting the regenerated
     collagen fibers obtained by the above prodn. process by a wet heat
     treatment at 50-160.degree. and a dry treatment at 20-220.degree.
     regenerated collagen fibers have soft feel, reduced odor, good
     setting properties, and curling durability, and are useful for hair
     substitutes, fabrics, etc.
    regenerated collagen fiber heat setting; epoxide regenerated
ST
     collagen fiber treatment; hair substitute regenerated
     collagen fiber; water absorption regenerated collagen
     fiber
ΙT
    Epoxides
     RL: NUU (Other use, unclassified); USES (Uses)
        (prodn. of odorless regenerated collagen fibers with soft
        feel and good setting properties)
IT
     Collagen fibers
     RL: PEP (Physical, engineering or chemical process); PRP (Properties);
PYP
     (Physical process); TEM (Technical or engineered material use); PROC
     (Process); USES (Uses)
        (prodn. of odorless regenerated collagen fibers with soft
        feel and good setting properties)
     Hair substitutes
IT
        (prodn. of odorless regenerated collagen fibers with soft
        feel and good setting properties for hair substitutes)
     1327-41-9, Aluminum chloride, basic
ΙT
     RL: NUU (Other use, unclassified); USES (Uses)
        (Berukotan AC-P; prodn. of odorless regenerated collagen
```

fibers with soft feel and good setting properties)

```
55892-56-3, Basic aluminum sulfate
    RL: NUU (Other use, unclassified); USES (Uses)
        (Lutan BN; prodn. of odorless regenerated collagen fibers
       with soft feel and good setting properties)
    106-89-8, Epichlorohydrin, uses 1310-73-2, Sodium hydroxide, uses
IT
    7757-82-6, Sodium sulfate, uses 10043-01-3, Aluminum sulfate
    RL: NUU (Other use, unclassified); USES (Uses)
        (prodn. of odorless regenerated collagen fibers with soft
       feel and good setting properties)
             THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT
RE
(1) Kanegafuchi Chem Ind Co Ltd; JP 04352804 A 1992 CAPLUS
(2) Kanegafuchi Chem Ind Co Ltd; JP 450370 A 1992
(3) Kanegafuchi Chem Ind Co Ltd; JP 05171510 A 1993 CAPLUS
(4) Kanegafuchi Chem Ind Co Ltd; EP 548946 A2 1993 CAPLUS
    ANSWER 3 OF 3 CAPLUS COPYRIGHT 2003 ACS on STN
L1
    2001:12698 CAPLUS
AN
DN
    134:57893
    Regenerated collagen fibers showing reduced odor on heating the
ΤI
    fibers and good setting properties manufactured by treating
    collagen fibers with monofunctional epoxy compounds and
    aluminum salts and manufacture thereof and setting of the fibers
    thereof
    Ueda, Masahiro; Makihara, Yoshihiro; Ueda, Takashi; Matsumura, Kunihiko
IN
    Kaneka Corporation, Japan
PA
                                        apple cout
SO
    PCT Int. Appl., 39 pp.
    CODEN: PIXXD2
DT
    Patent
LΑ
    Japanese
    ICM D06M013-11
IC
    ICS D06M011-45; A41G003-00; A61L027-00
    40-2 (Textiles and Fibers)
    Section cross-reference(s): 45, 62
FAN.CNT 1
                     KIND DATE
                                          APPLICATION NO. DATE
    PATENT NO.
                                          -----
PΙ
    WO 2001000920
                     A1 20010104
                                          WO 2000-JP4126
                                                           20000623
        W: CN, ID, JP, KR, US
        RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
            PT, SE
                     A1 20020605
                                          EP 2000-940816 20000623
    EP 1211347
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, FI, CY
                    A
PRAI JP 1999-179328
                           19990625
                    A
    JP 1999-191859
                           19990706
    WO 2000-JP4126
                     W
                         20000623
    The regenerated fibers are prepd. by treating regenerated collagen
AΒ
     fibers with monofunctional epoxy compds. (A) and Al salts (B) or
    treating the fibers with A and B to give fibers contg. 2-40% (as Al2O3)
В,
    or first treating the fibers with oxidn. agents and subsequently treating
    the fibers with A and B. The regenerated collagen fibers are
    set by treating the fibers with H2O at 20-100.degree. and heat-setting
the
     fibers at 60-220.degree. in the dry state. The fibers are useful for
    wigs, hair pieces, and doll hair. A cow hide soln. with collagen
    content 6% was spun into a coagulating bath at 5 m/min and treated with
an
    ag. soln. contg. 1.7% epichlorohydrin and 0.9% 2,4,6-
    tris(dimethylaminomethyl)phenol for 24 h at 25.degree. to give fibers
with
    epichlorohydrin content 42.6 equiv (on amino groups of collagen
    ). The fibers were washed, treated with an aq. soln. contg. 10% basic
    aluminum chloride (Berukotan AC-P) for 12 h at 25.degree., washed,
```

coated with a lubricant contg. amino-modified silicone emulsion, an dried

```
to give collagen fibers with Al203 content 12.5% and showing
     curling amt. 28.2% on shampooing the fibers and curling retention 70.0%
     after 5 washings.
     collagen regenerated fiber setting property; epichlorohydrin
ST
     treated collagen fiber setting property; epoxy compd
     treated collagen fiber setting property; aluminum
     oxychloride treated collagen fiber setting property; wig
     collagen regenerated fiber setting property; hair piece
     collagen regenerated fiber setting property
ΙT
     Toys
        (dolls, doll hair; regenerated collagen fibers with reduced
        odor during heating and good setting properties manufd. by treating
      collagen fibers with monofunctional epoxy compds. and
      aluminum salts for)
     Hair substitutes
ΙT
        (regenerated collagen fibers with reduced odor during heating
        and good setting properties manufd. by treating collagen
        fibers with monofunctional epoxy compds. and aluminum
        salts for)
ΙT
     Collagen fibers
     RL: PEP (Physical, engineering or chemical process); PRP (Properties);
TEM
     (Technical or engineered material use); PROC (Process); USES (Uses)
        (regenerated collagen fibers with reduced odor during heating
        and good setting properties manufd. by treating collagen
        fibers with monofunctional epoxy compds. and aluminum
        salts for)
     1327-41-9, Basic aluminum chloride
     RL: PRP (Properties); TEM (Technical or engineered material use); USES
        (Berukotan AC-P; regenerated collagen fibers with reduced
        odor during heating and good setting properties manufd. by treating
      collagen fibers with monofunctional epoxy compds. and
      aluminum salts)
     7722-84-1, Hydrogen peroxide, reactions
ΙT
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (oxidn. agent; regenerated collagen fibers with reduced odor
        during heating and good setting properties manufd. by treating
      collagen fibers with monofunctional epoxy compds. and
      aluminum salts)
ΙT
     106-89-8, Epichlorohydrin, uses
                                       122-60-1, Phenyl glycidyl ether
     10043-01-3, Aluminum sulfate
     RL: PRP (Properties); TEM (Technical or engineered material use); USES
     (Uses)
        (regenerated collagen fibers with reduced odor during heating
        and good setting properties manufd. by treating collagen
        fibers with monofunctional epoxy compds. and aluminum
        salts)
RE.CNT
              THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
(1) Agency Of Industrial Science And Technology; JP 4724199 B1 1972
(2) Kanegafuchi Chem Ind Co Ltd; EP 548946 A CAPLUS = 53 44917 49
(3) Kanegafuchi Chem Ind Co Ltd; JP 04333660 A 1992 CAPLUS
(4) Kanegafuchi Chem Ind Co Ltd; JP 04352804 A 1992 CAPLUS
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(5) Kanegafuchi Chem Ind Co Ltd; JP 450370 A 1992

(6) Kanegafuchi Chem Ind Co Ltd; JP 05171510 A 1993 CAPLUS

1

(FILE 'HOME' ENTERED AT 09:28:37 ON 21 AUG 2003)

FILE 'CAPLUS' ENTERED AT 09:28:44 ON 21 AUG 2003
L1 3 S COLLAGEN AND ALUMINUM AND EPOXY

FILE 'CAOLD' ENTERED AT 09:31:01 ON 21 AUG 2003 L2 0 S COLLAGEN AND ALUMINUM AND EPOXY

WEST

Generate Collection Print

L5: Entry 3 of 6

File: EPAB

Jun 5, 2002

PUB-NO: EP001211347A1

DOCUMENT-IDENTIFIER: EP 1211347 A1

TITLE: REGENERATED COLLAGEN FIBER REDUCED IN ODOR AND IMPROVED IN SUITABILITY FOR

SETTING, PROCESS FOR PRODUCING THE SAME, AND METHOD OF SETTING

PUBN-DATE: June 5, 2002

INVENTOR-INFORMATION:

NAME COUNTRY
UEDA, MASAHIRO JP
MAKIHARA, YOSHIHIRO JP
UEDA, TAKASHI JP
MATSUMURA, KUNIHIKO JP

ASSIGNEE-INFORMATION:

NAME COUNTRY

KANEGAFUCHI CHEMICAL IND JP
HOKUYO CO LTD JP

APPL-NO: EP00940816 APPL-DATE: June 23, 2000

PRIORITY-DATA: JP17932899A (June 25, 1999), JP19185999A (July 6, 1999)

INT-CL (IPC): <u>D06 M 13/11</u>; <u>D06 M 11/45</u>; <u>A41 G 3/00</u>; <u>A61 L 27/00</u>

EUR-CL (EPC): D01F004/00

ABSTRACT:

CHG DATE=20020702 STATUS=0> The present invention provides regenerated collagen fibers which have light color and excellent touch in wet conditions and which can be formed into desirable shape with the shape being maintained properly. The present invention also provides regenerated collagen fibers whose foul odor generated in thermal treatment can be inhibited. The present invention relates to regenerated collagen fibers obtained by treating collagen with a monofunctional epoxy compound and an aluminum salt. The present invention also relates to a process for preparing regenerated collagen fibers which comprises treating collagen with a monofunctional epoxy compound, and then treating the same in such a way that 2 to 40 % by weight of an aluminum salt converted to an aluminum oxide (Al203) basis is contained to said collagen.

WEST

Generate Collection Print

L5: Entry 2 of 6

File: EPAB

Jul 4, 2002

PUB-NO: WO002052099A1

DOCUMENT-IDENTIFIER: WO 2052099 A1

TITLE: PROCESS FOR PRODUCING REGENERATED COLLAGEN FIBER AND PROECSS FOR SETTING THE

SAME

PUBN-DATE: July 4, 2002

INVENTOR-INFORMATION:

NAME COUNTRY
UEDA, TAKASHI JP
CHIBA. TAKESHI JP

CHIBA, TAKESHI JP KAWAMURA, KOHEI JP

ASSIGNEE-INFORMATION:

NAME COUNTRY KANEGAFUCHI CHEMICAL IND JP

UEDA TAKASHI JP
CHIBA TAKESHI JP
KAWAMURA KOHEI JP

APPL-NO: JP00111250

APPL-DATE: December 21, 2001

PRIORITY-DATA: JP2000390767A (December 22, 2000)

INT-CL (IPC): D06 M 13/11

EUR-CL (EPC): D06M013/11; D06M011/38

ABSTRACT:

CHG DATE=20020802 STATUS=0>A process for producing a regenerated fiber by treating a regenerated collagen fiber with a monofunctional epoxy compound and a metallic aluminum salt characterized in that, in the treatment with the monofunctional epoxy compound, sodium hydroxide is added to such a level as giving a concentration of 0.001 to 0.8 N in the liquor to be treated and the treatment is initiated by adding an inorganic salt in such a level as to give the water absorption ratio of the regenerated collagen fiber product of 100% or lower depending on the amount of the sodium hydroxide added; and a process for setting the regenerated collagen fiber characterized by heat-setting the regenerated collagen fiber obtained by the above production process by a wet heat treatment at 50 to 160 DEG C and a dry treatment at 20 to 220 DEG C.

NAME

COUNTRY

TAKADA, MASAHIKO
MURATA, TERUICHI
FURUKAWA, MITSURU
SASAYAMA, ATSUSHI
TANAKA, AKIRA
YUGUCHI, MUNENORI
TAKAKU, KAZUHIKO
EDAMATSU, HITOMI
NAKASAKI, SHINGO

INT-CL (IPC): D06M 11/45; A61L 17/00

ABSTRACT:

PURPOSE: To provide a regenerated fiber completely free from a color and excellent in water resistance by adding a specific amount of an aluminum salt to a regenerated collagen fiber.

CONSTITUTION: The split leather of an animal is treated by an alkali solubilizing method or by an enzymatic solubilizing method, and the produced solubilized collagen is dissolved in an acidic solution prepared from an inorganic acid, an organic acid, etc., and subsequently spun into water-swollen regenerated collagen fibers, which are immersed in an aqueous solution of a basic aluminum chloride to produce regenerated collagen fibers containing the aluminum chloride in an amount of 8-20wt.% expressed in terms of aluminum oxide. The produced regenerated collagen fibers never have such a color as produced by a conventional treatment using a chromium salt, and are excellent in water resistance. The aluminum salt is preferably basic aluminum chloride or basic aluminum sulfate.

COPYRIGHT: (C) 1994, JPO

Full Title Citation Front Review Classification Date Retervince Sequences Attachments KANC	Change I triage			
Generate Collection Print				
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L5: Entry 4 of 6

File: EPAB

May 10, 2000

PUB-NO: EP000999297A1

DOCUMENT-IDENTIFIER: EP 999297 A1

TITLE: Method of producing water-insolubilized regenerated collagen fibers

PUBN-DATE: May 10, 2000

INVENTOR-INFORMATION:

NAME GOTO, MASAOKI

SAKASHITA, SHINICHI MATSUMARA, KUNIHIKO

ASSIGNEE-INFORMATION: NAME

KANEGAFUCHI CHEMICAL IND

COUNTRY

JP JΡ

JP

=45 6,24,573

COUNTRY

JР

APPL-NO: EP99120929

APPL-DATE: November 2, 1999

PRIORITY-DATA: JP31204498A (November 2, 1998), JP31581598A (November 6, 1998), JP30242699A (October 25, 1999)

INT-CL (IPC): D01 F 4/00 EUR-CL (EPC): D01F004/00

ABSTRACT:

CHG DATE=20001128 STATUS=O> A regenerated collagen fiber is subjected to water-insolubilizing treatment with a monofunctional epoxy compound to produce a water-insolubilized regenerated collagen fiber which can substantially maintain the color and the high knot tenacity, inherent in the collagen. Where the monofunctional epoxy compound is an epihalohydrin, a regenerated collagen fiber can be treated with this epihalohydrin and a sulfur compound to produce a water-insolubilized regenerated collagen fiber which can be permanent-wave set. In addition, the water-insolubilized regenerated collagen fiber can be converted into a fiber which can be permanent-wave set, by introducing a disulfide linkage into carboxylic groups of the collagen, which remain unmodified by the insolubilizing treatment.

End of Result Set

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L5: Entry 6 of 6

File: EPAB

Jun 30, 1993

PUB-NO: EP000548946A2

DOCUMENT-IDENTIFIER: EP 548946 A2

TITLE: Process for producing regenerated collagen fiber.

PUBN-DATE: June 30, 1993

INVENTOR-INFORMATION:

COUNTRY NAME JΡ FURUKAWA, MITSURU TAKADA, MASAHIKO JP JΡ MURATA, SHOICHI JΡ SASAYAMA, ATSUSHI

ASSIGNEE-INFORMATION:

COUNTRY JΡ

KANEGAFUCHI CHEMICAL IND

APPL-NO: EP92121894

APPL-DATE: December 23, 1992

PRIORITY-DATA: JP34483891A (December 26, 1991)

US-CL-CURRENT: 8/127.5; 435/273

INT-CL (IPC): $\overline{D01F}$ 4/00 EUR-CL (EPC): D01F004/00

ABSTRACT:

CHG DATE=19990617 STATUS=0> A process for producing regenerated collagen fiber from solubilized collagen including adjusting a degree of swelling of solubilized collagen to 100 to 300% and then treating the resulting solubilized collagen with an aqueous solution of a metal salt. The regenerated collagen fiber has excellent water resistance and undergoes no waving on contact with water.